

APPENDIX

1. (Rewritten) A structure comprising:

a polycrystalline material comprising crystallites of polymers with interstitial regions therebetween;

polymers are selected from the group consisting of a precursor to an electrically conductive polymer and an electrically conductive polymer;

said interstitial regions between said crystallites comprising amorphous material comprising an additive;

said additive provides mobility to said polymer to allow said polymer to associate with one another to achieve said crystallites;

said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.

3. (Rewritten) A structure according to claim 1, wherein said additive is a plasticizer.

7. (Rewritten) A structure comprising :

a polycrystalline material comprising crystallites of polymers with interstitial regions therebetween;

said polymer is selected from the group consisting of a precursors to an electrically conductive polymer and an electrically conductiv polymer;

said interstitial regions comprise an amorphous material selected from the group consisting of said polymers;

said amorphous material includes an additive;

said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.

10. (Rewritten) A structure according to claim 7, wherein said additive is selected from the group consisting of:

Adipic acid derivatives
Azelaic acid derivatives
Benzoic acid derivatives
Citric acid derivatives
Dimer acid derivatives
Epoxy derivatives
Fumaric acid derivatives
Glycerol derivatives
Isobutyrate derivatives
Isophthalic acid derivatives
Lauric acid derivatives
Linoleic acid derivative
Maleic acid derivative
Mellitates
Myristic acid derivatives
Oleic acid derivatives
Plamitic acid derivatives
Paraffin derivatives

Sebacic acid derivatives
Stearic acid derivatives
Succinic acid derivatives
Sulfonic acid derivative
Terpentines
Terpentine derivatives
Siloxanes
Polysiloxanes
Ethylene glycols
Polyethylene glycols
Polyesters
Sucrose derivatives
Tartaric acid derivative
Terephthalic acid derivative
Trimellitic acid derivatives
Glycol derivatives
Glycolates
Hydrocarbons

Phosphoric acid derivatives

Phosphonic acid derivatives

Phthalic acid derivatives

Polysilanes

Ricinoleic acid derivatives

18. (Rewritten) A structure comprising:

a polycrystalline material comprising crystallites of polyaniline with interstitial regions therebetween;

said polyaniline is selected from the group consisting of a precursors to an electrically conductive polyaniline and an electrically conductive polyaniline;

said interstitial regions comprise an amorphous material selected from the group consisting of polyaniline;

said amorphous material includes an additive in an amount from about 0.001% to about 90% by weight;

said additive is selected from the group consisting of poly-co-dimethylaminopropyl siloxane, poly (ethylene glycol) tetrahydro furfuryl ether, glycerol triacetate and epoxidized soy bean oil;

said polycrystalline material is characterized by a degree of crystallinity and a degree of amorphous regions, said degree of polycrystallinity and said degree of amorphous regions are selected by selecting the composition of said additive and the amount of said additive.

21. (Rewritten) A structure according to claim 1, wherein the additive is in an amount for about 0.001% to about 90% by weight.

23. (Rewritten) A structure according to claim 1, wherein said amorphous regions have crystalline order.